

KARPOVA, A. L.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 5/25

Authors : Karpova, A. L., and Moshkovskiy, Yu. Sh.

Title : ~~Effect of gelatin properties on the susceptibility of photo emulsions and optical sensitization~~  
Effect of gelatin properties on the susceptibility of photo emulsions and optical sensitization

Periodical : Zhur. fiz. khim. 28/10, 1745-1747, Oct 1954

Abstract : The properties of nine gelatin samples containing various amounts of photo-active micro-components were investigated to determine their effect on the optical sensitization of photo emulsions with a panchromatic dye. It was observed that the effect of optical sensitization decreases when the silver ion reducing agent in the gelatin exceeds the amount of  $16 \cdot 10^{-7}$  g-equiv. Ag per 1 g. gelatin. Any increase in the content of the reducing component in the gelatin increases the reducing effect of the optical sensitization. The negative effect of the silver ion reducing component on the optical sensitization of photo emulsions is apparently connected with the increase in fog formation in the presence of the dye. Three USSR references (1948-1952). Table; graph.

Institution : All-Union Scientific Research Motion Picture and Photo Institute  
Submitted : November 13, 1953

AUTHORS: Karpova, A. L., Mikhaylova, A. A., SOV/20-121-1-37/55  
Chibisov, K. V., Corresponding Member, Academy of Sciences, USSR

TITLE: On the Photographic Activity of Gelatin (O fotograficheskoy aktivnosti zhelatiny)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 1, pp. 133 - 135 (USSR)

ABSTRACT: The authors tried to remove the admixtures from gelatin by means of adsorbers and to separate them by means of an electro-dialysis with the aim to investigate the influence of these admixtures on the chemical "ripening". Various adsorbers exhibit a selective action and only some resins with ion exchange were suited for a practically complete removal of all active admixtures. By this the different gelatin samples were given the same properties and turned into slowly acting gelatin. Also electrodialysis removes the active admixtures and renders gelatin inert. If a five-chamber device is applied the admixtures can be separated in the form of an anodic and a cathodic fraction by electrodialysis. The substances of the cathode fraction do not directly interact with the silver ions. The compounds with unstable sulfur, the reducing agents,

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On the Photographic Activity of Gelatin

SOV/20-121-1-37/55

and the complex forming substances of the first kind, however, turn into the anode fraction. According to photographic investigations, the solution of the cathode fraction slows the ripening down while the anode fraction accelerates it. The photographic effect of the gelatin during ripening is realized by its two components: The macro-component, i.e. the albumins of the gelatin, exhibits a protective effect and acts reducingly; the micro-components control the velocity of the chemical ripening. There are 3 figures, 2 tables, and 3 references, which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut  
(All-Union Scientific Research Institute of Photography and Cinematography)

SUBMITTED: March 18, 1958

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SOV/77-4-1-6/22

AUTHOR: Karpova, A. I.

TITLE: About the Photographic Activity of the Gelatin (O fotograficheskoy aktivnosti zhelatiny)

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1959, Vol 4, Nr 1, pp 38-48 (USSR)

ABSTRACT: The article describes methods of analyzing photographically active gelatin admixtures and discusses the experimental data obtained. The active admixtures of the Soviet KZhZ-782, KZhZ-418, KZhZ-00 and KZhZ-7174 gelatins are each compared with one French, Japanese, American and German gelatin (Table 1). Special experiments were conducted with the Soviet KZhZ-479 gelatin (Table 4). The problem of the microcomponents of a gelatin, which exert an influence upon the kinetics of the chemical ripening process, is investigated and it is shown that ripening speed is regulated by two groups of admixture agents which have the closest affinity to silver ions. It is further demonstrated that there exists

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a linear dependance between the speed of chemical ripening and the activity coefficient of the gelatin, i.e. a numerical ratio between the accelerating and retarding agents of the ripening process. This knowledge permits a gelatin to be prepared which will give a desired quality. Similar investigations were made by Ye.A. Zimkin and R.L. Yafarova. Their conclusions agree with those of the author who was guided in his work by Associate Member of the AS USSR, K.V. Chibisov; and by A.A. Titov. There are 4 graphs, 5 tables and 6 references, 2 of which are British and 4 Soviet.

ASSOCIATION: NIKFI

SUBMITTED: June 29, 1957

Card 2/2

23(

SOV/77-4-3-4/16

AUTHORS: Karpova, A.L., Mikhaylova, A.A., Chibisov, K.V.

TITLE: On the Photographic Activity of Gelatine  
II. An Increase in the Kinetic Activity of Gelatine

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinemato-  
grafii, 1959, Vol 4, Nr 3, pp 183-192 (USSR)

ABSTRACT: This is a study of the effect of sodium thiosulfate on the second ripening process of gelatine solutions, shown on the example of three different gelatine components. On the basis of experimentally obtained data, the authors deduced a general equation, expressing with it the dependence of the rate of second ripening on the quantity of natural and added accelerators. Parallel to these experiments, the authors studied the effect of other sulfurous sensitizers and also of bromine (silver) ion concentration. Different quantities of sodium thiosulfate and the solid phase separated from the colloid of the first ripening pro-

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SOV/77-4-3-4/16

On the Photographic Activity of Gelatine. II. An Increase in the Kinetic Activity of Gelatine

cess were added to solutions of gelatine with different activity coefficients. The solid phase contained 3 mol. % AgJ in addition to AgBr. The authors started from the assumption that in the stage of chemical ripening sodium thiosulfate acts only as a complex-forming substance, causing acceleration of chemical ripening. The added quantity A', therefore, was added to the quantity A of natural accelerators in the gelatine. These data, in connection with the quantity B of natural retarders, served as the basis for the calculation of the activity coefficient ( $K = \frac{A + A'}{B}$ ).

Table 1 demonstrates the results obtained. It contains in addition the values  $\tau$  (time required to reach the maximum light sensitivity) and  $\tau_0$  ( $\tau_0 = k\tau$ ). The values  $\tau$  were calculated with the aid of the curves of change in light sensitivity for each concentration of

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$\text{Na}_2\text{S}_2\text{O}_3$  introduced into the emulsion. This calculation was carried out, to demonstrate the subordination of the values to the already found [reference 2] linear dependence between the activity coefficient and the rate of chemical ripening and, consequently, to confirm the assumed role of  $\text{Na}_2\text{S}_2\text{O}_3$  in this process. The results confirm this assumption, showing that  $\text{Na}_2\text{S}_2\text{O}_3$  behaves like those natural complex-forming components, which have most affinity to the silver ions. The obtained values are characterized by two prominent features: 1) A strict dependence of  $\tau_0$  on the conditions of emulsion synthesis, and 2) fluctuations of the individual values of this magnitude within parallel experiments. This shows that  $\tau_0$  (time required to reach the maximum

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SCV/77-4-3-4/16

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light sensitivity, if  $k=1$ ) is a very sensitive magnitude indicative of the observation of constancy of the established synthesis conditions. On the basis of their experiments, which confirmed the role of  $\text{Na}_2\text{S}_2\text{O}_3$  as accelerator during the ripening process, the authors enlarged the previously obtained formula

$\tau_0 = \frac{A}{B} \tau$  by adding  $A'$  to the numerator of the activity coefficient. The equation (in its final form:

$A' \tau_0 B \frac{1}{\tau} - A$ ), on the basis of the dependency  $\frac{1}{\tau}$ ,  $A' \tau^2$  (see graph 1, which represents this dependency for the three series of experiments in table 1), makes it possible to determine the content of accelerators and retarders in gelatine. In order to clarify the role of sodium thiosulfate, the authors

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considered it suitable to compare its effect on chemical ripening with the effect of other compounds with an unstable sulphur component. A study of the effect of thiourea, sodium tetrathionate and trithionate and potassium rodanide revealed that, with the exception of thiourea, these compounds are not subject to the general equation (graphs 2-4). They showed a retarding effect on the ripening process. Finally, the authors studied the effect of pAg (pBr) on the kinetics of chemical ripening. Graph 5 shows curves (based on previously described experimental data), which represent the dependence of the rate of ripening on pAg for bromine and bromo-iodine emulsions. The curves (table 4) show the complicated character of this dependency. A further factor is the instability of the maximum light sensitivity (section 2 of graph 5), which can be reached at various values

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of pAg. Optimum pAg can be assumed in the case, when the maximum light sensitivity has been reached. The strong effect of the nature of the gelatine component on this phenomenon however has to be taken into consideration. This factor also plays a role in the dependence of the change of maximum sensitivity on pAg. The last section is a theoretical generalization of the results. Table 4 is a synopsis of the effects exercised by the various substances on the rate of ripening, the maximum of light sensitivity and the fog phenomenon. The latter is considered in connection with the maxima of light sensitivity. The authors mention the Soviet scientist V.A. Bekunov /reference 7\_7, who proved the linear dependence (pAg,  $\frac{1}{\tau_0}$ ). There

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are 5 tables, 5 graphs and 8 references, 6 of which are

SOV/77-4-3-4/16

On the Photographic Activity of Gelatine. II. An Increase in  
the Kinetic Activity of Gelatine

Soviet and 2 English.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy kinofotoin-  
stitut (NIKFI) (All-Union Scientific Research In-  
stitute for Motion Pictures and Photography (NIKFI))

SUBMITTED: 22 August, 1957

Card 7/7

KARPOVA, A.L.; CHIBISOV, K.V.

Additional reflections on the nature of the photographic activity  
of gelatin. Zhur.nauch.i prikl.fot.i kin. 5 no.4:301-308

Jl-Ag '60.

(MIRA 13:8)

(Gelatin)

(Photographic emulsions)

NEVSKIY, M.V.; POTATUYEVA, O.N.; RAKHIMOV, A.R.; BGASHEVA, V.S.;  
KARPOVA, A.N.; GANIYEV, M.G.

Phagoprophylaxis of typhoid fever in children of preschool  
age. Zhur.mikrobiol., epid. i immun. 42 no.12:62-63 D '65.  
(MIRA 19:1)

1. Uzbekskiy institut epidemiologii, mikrobiologii i infektionnykh  
zabolevaniy i Tashkentskaya oblastnaya sanitarno-epidemiologi-  
cheskaya stantsiya.

*ca* KARPOVA, A. S.

PROCESSES AND PROPERTIES INDEX

Formation of iron blooms on grog ware. P. S. Mamykin and A. S. Karpova. *Ogneupory* 6, 1071-5 (1938).--A method of rendering the Fe admixts. harmless by grinding in ball or tubular mills was worked out. E. R. S.

19

ASB 55.6 METALLURGICAL LITERATURE CLASSIFICATION

1330 630499

1331 630499

KARLINA, A. S.

"Chemistry in Electric Vacuum Technology," pp 239-243

Abst: Physicochemical processes in electron devices relating to their technology and affecting their performance and their failure are discussed.

SOURCE: Trudy Ryaznenskogo Radiotekhnicheskogo In-ta VVO SSSR (Works of the Ryazan' Radio Engineerin Institute of the Ministry of Higher Education USSR) Volume 1, Moscow, 1956

Sum 1854



TOLSTOY, M.P.; SHCHERBAKOV, A.V.; YUDIN, S.S.; BELYAYEV, I.V.;  
ZADOROZHKO, L.I.; IVANOV, V.K.; KARPOVA, A.S.

Reviews. Izv. AN SSSR. Ser. geol. 30 no.7:127-133 J1 '65.  
(MIRA 18:7)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya  
imeni Timiryazeva i Geologicheskij institut AN SSSR (for Tolstoy,  
Shcherbakov). 2. TSentral'naya geclogo-geofizicheskaya ekspeditsia  
Severo-Vostochnogo geologicheskogo upravleniya, Magadan (for Yudin,  
Belyayev, Zadorozhko, Ivanov, Karpova).

SHCHUKINA, L.A.; VDOVINA, R.G.; SHVETSOV, Yu.B.; KARPOVA, A.V.

Preparative method of production of L- and D-~~g~~-hydroxyisovaleric acid. Izv. AN SSSR Otd.khim.nauk no.2:310-312 F '62.  
(MIRA 15:2)

1. Institut khimii prirodnikh soedineniy AN SSSR i Institut biologicheskoy i meditsinskoy khimii AMN SSSR.  
(Isovaleric acid)

VEDOVA, R.G.; ALEKSEYEV, I.V.; TRIFONOVA, Zh.I.; KARLOVA, A.V.

Synthesis of R-2-methyl-1,2-bis- $\beta$ -pyridyl-1-propanone,  
a pyridine analog of amphenone. Zh. prikl. khim. 38  
no.11:2607-2609 N '65. (MIRA 1965)

1. Institut biologicheskoy i meditsinskoy khimii SSSR.  
Moskva. Submitted September 17, 1963.

KARPOVA, A.V.

Indirect method of determining the weight of growing corn for  
purposes of making an agrometeorological evaluation of its  
growth. Trudy TSIP no.101:102-107 '62. (MIRA 15:9)  
(Crops and climate) (Corn (Maize))

KARPOVA, E. S., Cand Agr Sci -- (diss) "Effect of prolonged application of organic and mineral fertilizers in grass-field flax crop rotations on change in conditions of plant nutrition." Moscow, 1960. 19 pp; (Moscow Order of Lenin Agricultural Academy im K. A. Timiryazev); 150 copies; price not given; (KL, 26-60, 141)

KARPOVA, F.I.

Practices of the Dzerzhinskii plant in the electrolytic cleaning  
of tanks. Biul.tekh.-ekon. inform. Tekh.upr.Min.mor.flota 7  
no.10:102-106 '62. (MIRA 16:9)

1. Zaveduyushchaya laboratoriyey sudoremontnogo zavoda im.  
Dzerzhinskogo.

(Tank vessels--Cleaning)

BELOSHAPKO, V.F.; KARPOVA, F.V.; SHABANOVA, M.V.; FOTIYEVA, T.I.

Technological testing of the continuous production line bale -  
carded sliver at the "Krasnoye Znamia" Cotton Combine in  
Ramenskoye. Nauch.-iss. trudy TSENKHBi za 1962 g.:3-14 '64.  
(MIRA 18:8)

PETROVSKIY, Boris Vasil'yevich; KOZLOV, Ivan Zakharovich;  
KARPOVA, G.D., red.

[Cardiac aneurysms] Anevrizmy serdtsa. Moskva, Meditsina,  
1965. 275 p. (MIRA 18:12)



KARPOVA, G.D., red.; BOGACHEVA, Z.I., tekhn.red.

[Practical instructions for prevention and treatment of grippe and acute catarrh of the respiratory tract] Metodicheskie ukazaniia po profilaktike i lecheniiu grippe i ostrykh katarov dykhatel'nykh putei. Moskva, Gos.izd-vo med.lit-ry, 1957. 21 p.  
(MIRA 11: 6)

1. Russia (1923- U.S.S.R.) Ministerstvo zdavookhraneniia.  
(RESPIRATORY ORGANS--DISEASES)

TAREYEV, Ye.M., prof. (Moskva), otv.red.; MOLCHANOV, N.S., prof.,  
red.; VOTCHAL, B.Ye., prof., red.; BONDAR', Z.A., doktor med.  
nauk, red.; POPOV, V.G., dotsent, red.; MEYRAIEV, G.A.,  
dotsent, red.; KARPOVA, G.D., red.; GOTOVTSEV, P.I., red.;  
BEL'CHIKOVA, Yu.S., tekhn.red.

[Proceedings of the 14th All-Union Congress of Therapists  
in Moscow, 1956] Trudy XIV Vsesoiuznogo s"ezda terapevtov.  
Pod obshchei red. E.M.Tareeva. Moskva, Gos.izd-vo med.lit-ry,  
1958. 735 p. (MIRA 13:5)

1. Vsesoyuznyy s"yozd terapevtov. 14th, Moscow, 1956. 2. Deystvi-  
tel'nyy chlen AMN SSSR (for Tareyev). 3. Chlen-korrespondent AMN  
SSSR (for Molchanov).

(THERAPEUTICS--CONGRESSES)

MYASNIKOV, Aleksandr Leonidovich, prof. kardiolog; KARPOVA, G.D.,  
red.

[Hypertension and atherosclerosis] Gipertonicheskaya bo-  
lezn' i ateroskleroz. Moskva, Meditsina, 1965. 613 p.  
(MIRA 18:8)

1. Deystvitel'nyy chlen AMN SSSR direktor Institut terapii  
AMN SSSR (for Myasnikov).

VINOGRADOV, A.V.; KARPOVA, G.D.; TSIBERNIKHER, T.D.

Hemodynamic indices in healthy persons of various ages. Kardiologia 5 no.2:66-70 Mr-Apr '65. (MEDA 18:7)

1. Institut terapii (direktor - deysvitel'nyy chlen AMN SSSR prof. A.L.Myasnikov) AMN SSSR, Moskva.

ABRAMOV, M.G., doktor med. nauk; ALEKSEYEV, G.A., prof.; ASTAPENKO, M.G., prof.; BUREYKO, V.M., dots.; VARSHAMOV, L.A., prof.; VINOGRADSKIY, A.B., KARPOVA, G.D.; KASSIRSKIY, I.A., prof.; KUSHKIY, R.O., doktor med. nauk; LIBERMAN, B.I.; LIKHTSIYER, I.B., prof.; LUZHETSKAYA, T.A., kand. med. nauk; MOISEYEV, S.G., prof.; NASONOVA, V.A., dots.; NESGOVOROVA, L.I.; POROSHINA, I.I.; PREOBRAZHENSKIY, A.P., dots.; RADVIL', O.S., prof.; RATNER, M.Ya., doktor med. nauk; RASHEVSKAYA, A.M., prof.; SEMENDYAYEVA, M.N., kand. med. nauk; SIGIDIN, Ya.S., kand. med. nauk; ARTEM'YEV, S.G., red.

[Therapeutist's handbook] Spravochnik terapevta. Izd.2.,  
ispr. i dop. Moskva, Meditsina, 1965. 863 p.

(MIRA 18:6)

1. Deystvitel'nyy chlen AMN SSSR (for Kassirskiy).

2

L 51525-65 ENT(m)/EWP(j)/T PC-1 21  
 ACCESSION NR: AP5015300 UR/0285/65/0007/0069/0069  
 678.71/74 21  
 3

AUTHOR: Korshak, V. V.; Mozgova, K. K.; Zasachkina, A. P.; Kharitonova, V. M.;  
Got'ye, T. N.; Karpova, G. D.; Morgun, L. A.

TITLE: A method for producing polyamide fiber.<sup>15</sup> Class 39, No. 10672<sup>16</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 69

TOPIC TAGS: polyamide resin, thermal stability, methacrylate, acrylic acid

ABSTRACT: This Author's Certificate introduces: 1. A method for producing poly-  
 amide fiber by polymerization of  $\epsilon$ -caprolactam. A copper salt of the copolymer of  
 methylacrylate and acrylic acid is added to the monomeric  $\epsilon$ -caprolactam to improve  
 the resistance of the fiber to heat and light. 2. A modification of this method in  
 which the amount of copper salt added is 0.01%.

ASSOCIATION: none

SUBMITTED: 02Mar62 ENCL: 00 SUB CODE: 00, 00  
 2  
 Card 1/1 NO NEW SOW: 000 OTHER: 000

MYASNIKOV, A.L., prof., red. (Moskva); KARPOVA, G.D., red.; MOMOT,  
Z.I., red.; NESGOVOROVA, L.I., red.; ZUREVA, N.K., tekhn. red.

[Transactions of the First All-Russian Congress of Theraputists]  
Trudy Vserossiyskogo s"ezda terapevtov. 1st, Moscow, 1958. Pod  
obshchei red. A.L. Myasnikova. Moskva, Gos. izd-vo med. lit-ry,  
1960. 453 p. (MIRA 14:5)

1. Vserossiyskiy s"ezd terapevtov. 1st, Moscow, 1958. 2. Day-  
stvitel'nyy chlen ~~AMN~~ SSSR (for Myasnikov)  
(~~THERAPEUTICS--CONGRESSES~~)

STRAZHESKO, Nikolay Dmitriyevich[deceased]; YANOVSKIY, David  
Naumovich; KARPOVA, G.D., red.; GOROVITS, V.A., tekhn.  
red.

[Atlas of clinical hematology] Atlas klinicheskoi gematologii.  
Moskva, Medgiz, 1963. 97 p. 40 plates. (MIRA 16:7)  
(HEMATOLOGY—ATLASES)



VINOGRADOV, A.V.; VOROB'YEVA, A.I.; KARP'VA, G.I.; TO E. MAKHEP, T.D.

Changes in hemodynamics in myocardial infarction. Kardiologiya  
2 no.6:37-42 H-0'62. (MIRA 17:8)

1. Iz Instituta terapii ( dir. - deystvitel'nyy chlen AMN SSSR  
prof. A.I. Myasnikov ) AMN SSSR.

GOLD'BERG, D.I., prof.; LEVINA, G.D.; DALINGER, L.M.; KARPOVA, G.V.;  
GOL'DBERG, Ye.D.; TETERINA, V.I.; LAVROVA, V.S.; TIMAKIN, N.P.;  
GOL'DBERG, A.I.; CHERNOVA, Ye.A.

Clinical significance of erythrocytometry. Probl. gemat. i perel.  
krovi 9 no.10:8-14 0 '64. (MIRA 18:3)

1. Tomskiy meditsinskiy institut.

3 (5,8)

AUTHORS: Logvinenko, N. V., Karpova, G. V. SOV/20-127-6-37/51

TITLE: Concretional Forms of the Tauric Flysh of the Crimea

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 6, pp 1276 - 1279 (USSR)

ABSTRACT: The oldest sediments of the Crimea, for the upper part of which an Upper-Triassic (Carnian) age was ascertained (Ref 2), represent a terrigenous flysh. It consists of a rhythmic interbedding of sandstones, aleurolites and argillites (Refs 3,4). If the rhythms exhibit an ordinary structure of 2 members, the 1st element of the rhythm consists of granular rocks, the 2nd (3rd) of loamy rocks without carbonate (argillites). Both elements of the rhythm contain concretional forms, either real concretions or concretional intermediate layers. Among them, carbonate (magnesium-iron carbonate) and sulphide concretional forms are distinguished. Rhythms with sandstones containing sulphide concretions do not contain any carbonate concretions. And vice versa, rhythms containing carbonate concretions are free of sulphide concretions; scattered sulphides occur in small quantities only. The carbonate concretional forms nor-

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Concretional Forms of the Tauric Flysh of the Crimea SOV/20-127-6-37/51

mally lie in the midst of the argillites and clay-alsurolites of the 2nd element of the rhythm. The quantity of carbonate concretional intermediate layers increases with a growing quantity of clay rocks in the cross section. The concretions may be either distinctly separated, or they form gradual transitions to the containing rocks. The color of the said formations is usually dark-gray or black on a fresh surface of fracture; they are always enclosed in a ferriferous envelope, solid, dark-grained, with a half-scaly fracture, and homogeneous texture. A formation of zones was not observed. Clear-crystalline pyrite precipitations in the central part, and fine calcite veins of evidently later origin, occur here and there. In all cases, the ground mass consists of micro-granular (pelitomorphic) or finely-granular magnesium-iron carbonate mineral of the magnesite-siderite series. Considerable quantities of ferrous iron, small quantities of manganese oxide, and an increased content of CaO as compared with MgO, are characteristic from the chemical point of view. After converting the chemical analyses to carbonate components, it becomes evident that the carbonate portion is of a complex composition. On the

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Concretional Forms of the Tauric Flysh of the Crimea SOV/20-127-6-37/51

other hand, the optical, thermal (Fig 1) and X-ray investigations speak in favor of monominerality, or in any case for the formation of concretions according to an equal type. Table 1 shows the roentgenoscopical results. Table 2 indicates the mineralogical characteristics. The concretions of carbonate composition have formed in maritime terrigenous muds (siderite facies). Pyrite concretions received their material from the same muds during the diagenetic stage (sulphide or  $H_2S$ -facies). There are 1 figure, 2 tables, and 6 references, 5 of which are Soviet.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo  
(Khar'kov State University imeni A. M. Gor'kiy)

PRESENTED: April 17, 1959, by N. M. Strakhov, Academician

SUBMITTED: April 17, 1959

Card 3/3

1. KARPOVA, G.V.
2. USSR (600)
4. Sandstone
7. Sandstone with horn blende in coal-bearing stratum of the middle Juva in the Donets Basin. Dokl. An USSR, 86, No.6, 1952
9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

11 May 53

USSR/Geology - Coal Deposits

Geologist KARPOVA, G. V.

"Problem of the Alluvial Phase of the Upper Batskiy Coal-bearing Deposits on the North-western Border of the Donets Ridge," G. V. Karpova and B. P. Makridin

DAN SSSR, Vol. 90, No 2, pp 263-265

Assume that, on the right bank of the North Donets, below the Izyum River, where sandy rocks are separately distributed, more significant upheavals are experienced than in northern and western recumbent areas, where sediments play an inferior role, but clays and silstones predominate. Presented by Acad D. S. Belyankin, 13 Mar 53.

21-741

KARPOVA, G. V.

Fuel Abstracts  
June 1954  
Atmospheric Pollution

✓ 4254. MINERAL AND PETROGRAPHIC CHARACTERIZATION OF FACIES OF  
CARBONIFEROUS SERIES IN TONDASS. Logvinenko, I. V. and Karpova, G. V.  
(Dokl. Akad. Nauk SSSR (Rep. Acad. Sci. U.S.S.R.), 1 Jan. 1954, vol. 94, (1),  
133-136). A detailed description of samples representing the eighteen facies  
named in 1951 and 1952 by the expedition of the Academy of Sciences, U.S.S.R.,  
led by Yu. A. Zhurchikov. (L).

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MARCOVA, G. V.

"Lithology and Paleogeography of the Archaean Strata of the Western Part of the Donets Basin." Cand Geol-Min Sci, Khar'kov State U imeni A. M. Gor'kiy, Min Higher Education USSR, Khar'kov, 1955. (KL, No 12, Mar 55)

SC: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

KARPOVA, G.V.

LOGVINENKO, Nikolay Vasil'yevich; ~~KARPOVA, G.V.~~ kandidat geologo-mineralogicheskikh nauk, otvetstvennyy redaktor; TROFIMENKO, A.S., tekhnicheskiiy redaktor

[Introduction to methods for studying sedimentary rocks] Vvedenie v metodiku issledovaniia osadochnykh porod. Khar'kov, Izd-vo Khar'kovskogo gos.univ.im. A.M.Gor'kogo, 1957. 129 p. (MLRA 10:8)  
(Rocks, Sedimentary)

AUTHOR: Karpova, G. V.

20-114-6-43754

TITLE: On Argillaceous Minerals of the Araucarites-Series of the Donets Basin (Donbass) and on Their Importance for the Characterization of Facies  
(O glinistyykh mineralakh araukaritovoy svity Donbassa i ikh znachenii dlya kharakteristiki fatsiy).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1294-1296 (USSR)

ABSTRACT: This series represents a boundary-horizon between the Carboniferous and Permian Deposits. Clastic rocks are most widely spread here, more than half of them being finely grained sandstones and aleurolites (reference 3). Argillaceous minerals are scarce. Hydromica, minerals of the beidellite-montmorillonite group and kaolinite were found among the latter. The argillaceous rocks are as a rule polymineral here. They form certain paragenetic associations in which one or the other mineral is predominant. This permits a precise determination of the separation of the genetic types of rocks and the characterization of the facies. The argillaceous minerals no doubt reflect the conditions prevailing during the sedimentation or rather during the diagenesis of sedimentation. The composition of the argillaceous minerals

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is, however, also determined by the character and the intensity of the weathering of the feeding province, by the duration of transport as well as by the subsequent modifications of the rocks (epigenesis). Clay- and aleurolite-rocks with prevailing hydromica may be classified with the lagoon- and littoral-marine facies. Sand rocks with hydromica-cement as well as coaly argillites and aleurolites also belong here. Argillaceous minerals with prevailing beidellite-montmorillonite are genetically to be classified with the marine or the littoral-marine deposits, more seldom with the lagoon-sediments. The above-mentioned predominance is probably connected with the successive transformation of the hydromica-particles during the diagenesis in the mud of the Araucarites sea in the deepest places of the lagoons. But the late diagenesis (epigenesis) might also have played a part here and caused a similarity of the argillaceous minerals of all above-mentioned facies. Kaolinite occurs in the suite in the cement of the sandstones and aleurolites in the form of aggregates of scaly structure. Kaolinite is epigenetically

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formed in the weathering of feldspar and mica. It also occurs in the colloidal fractions which are included in coarse- or large-grained sandstones of a continental type and sometimes also of a delta-type. Sandstones and gravelites with splinters of argillaceous rocks of a kaoline-composition are with a washing-out deposited on the deposits lying under them. They have an oblique stratified structure running in one direction which in the upper part of the parcels goes over into crossed layers. Such deposits characterize the river-bed facies. Carbonized or silicified large plant fossils and lens-shaped coal-inclusions occur here. Thus the minerals of this suite can no doubt be used for a characterization of the facies, provided that their mutual paragenetic relations with one another and with the other minerals are taken into account. The predominance of the hydromicas in the colloidal fraction, a rather varied granulometric characteristic of the argillaceous rocks proper (reference 3) indicate a near source of denudation, a rapid imbedding of the material and the absence of an

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intensive weathering on the mainland. A lagoon type of  
sedimentation is predominant. The continental conditions  
of the sedimentation were insignificant and the climate  
toward the end of the Carboniferous became drier and drier.  
There are 7 references, all of which are Slavic.

ASSOCIATION: **Mining Institute**, Khar'kov (Khar'kovskiy gornyy institut)

PRESENTED: February 6, 1957, by N. N. Strakhov, Academician

SUBMITTED: May 22, 1956

Card 4/4

AUTHORS: Logvinenko, H. V., ~~Karpova, G. V.~~, SOV/20-121-3-37/47  
Shandyba, K. G., Shaposhnikov, D. P.

TITLE: The Types of Terrigenous Flysh in the Tauric Formation of the  
Crimea (O tipakh terrigenogo flisha v tavrisheskoy formatsii  
Kryma)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 3,  
pp. 531 - 534 (USSR)

ABSTRACT: The sediments of the tauric formations (Tavrisheskaya formatsiya;  
they were formed in the Upper Triassic Lower Jurassic, Refs  
3,1,4) are marked by flysh-type strata. The strata are 2-membered  
(Refs 1,2): The first member is formed by granular rocks:  
gravelites, sandstones with grains and aleurolites of varying  
sizes. The second element of the stratum, which is represented  
by carbonate rocks in the classical flysh formations, (Alps =  
Al'py, Caucasus = Kavkaz) is lacking in the tauric formation.  
Carbonate concretions and concretion intermediate layers are  
attached to the III<sup>rd</sup> element of the stratum. These, however, are  
not always present. The strata are 10-15 to 20-30 cm thick.  
Thinner or thicker strata are less frequent; a thickness of  
200-250 cm is an exception. Several types occur among the

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The Types of Terrigenous Flysh in the Tauric  
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2-membered ones: A) A complete stratum consisting of the following elements: gravelite, sandstone, aleurolite, argillit (Ia + Ib + Ic + III); it does not occur frequently; B) Usually a stratum consisting of Ib + Ic + III or C) Ib + III or D) Ic + III; this is the most widespread type. Type A is called normal flysh, type B is sandy or sandstone flysh, type C is called aleurolite-argillit flysh and type D--argillit flysh. Concretions and concretion intermediate layers frequently occur in flysh. In aleurolites traces of worms are visible. Apart from the above mentioned 4 flysh types we know 2 other types: normal flysh with thick (1,0 - 1,8 cm) medium and coarse-grained sandstones (belongs to type A) and focoidal flysh (to type C) with a mass development of mud eater traces. Additional strange flyshoid sediments occur in the tauric formation. They consist of argillit with big, loaf-shaped carbonate concretions and lense-shaped concretion intermediate layers. The rocks of the tauric formation show numerous types of flysh textures: hieroglyphs of different types, wave marks, a diagonal structure of the strata of maritime type, small folds caused by subaqueous land slides. Various types of hieroglyphs are mentioned. At the end of the

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paper the authors show the order of alternating of the flysh  
types ( 5 varieties). There are 1 figure and 4 references, 4  
of which are Soviet.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im.A.M.Gor'kogo  
(Khar'kov State University imeni A.M.Gor'kiy)

PRESENTED: March 31, 1958, by N.M.Strakhov, Member, Academy of Sciences, USSR

SUBMITTED: March 31, 1958

Card 3/3

3(8)

SOV/20-124-4-52/67

AUTHORS:

Logvinenko, N. V., Karpova, G. V., Shandyba, K. G.,  
Shaposhnikov, D. P.

TITLE:

On the Mineralogical-Petrographical Characterization of the Tauric  
Formation in Crimea (K mineralo-petrograficheskoy kharakteristike  
tavrisheskoy formatsii Kryma)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 911-914 (USSR)

ABSTRACT:

This formation consists of terrigenous rocks: sandstones, "aleuro-  
lites" and argillites. Carbonate rocks are lacking, but carbonate  
contractions and intermediate strata are widespread. Most rare are  
gravelites. The individual kinds of rock are described. Sandstones  
contain feldspar (5-7 up to 10-15 %) and quartz, or quartz and  
glimmer (muscovite and biotite) as well as rock splinters (few).  
Potassium feldspar is rare, however, the albite, albite-oligoclase  
and oligoclase type are more frequent. Apart from rock-forming  
main minerals there occur also: zirconium, rutile, tourmaline,  
apatite, spinel and other accessories. Octahedrite-brookite and  
chlorite often develop after biotite (Table 1). With respect to  
texture, sandstones are combined by contact and contact-pore cement  
and, less frequently, by basal-pore cement. Cement is sometimes  
lacking, and the rock becomes quartzite-like. Both sandstones and

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On the Mineralogical-Petrographical Characterization of the Tauric Formation  
in Crimea

aleurolites contain pyrites. By weathering, hematite and brown iron hydroxides are produced from them. In the argillites, pyrite is finely dispersed. The results of thermal and radiographic analysis of argillites as well as the results of electronograms are given. Besides finely disperse silicates and coarsely crystalline admixtures, there are in argillites obviously also diagenetic and epigenetic minerals of the sulfide class (pyrites) and the carbonate class (calcite, rarely dolomite, usually carbonate of the magnesite-siderite series). A specific feature of rocks of the Tauric formation is their coloration: mostly dark, from dark almost to black. These shades have various causes and are bound to rock types. The coloration is due to both organic (coal substance) and mineral pigments (pyrites). A fine plant dendrite converted into coal occurs throughout the formation and is present in any rock type, i.e. in a very fine state in the lower part (visible in sandstones) and in coarse state in the upper part (some centimeters high). With respect to secondary transformations, terrigenous rocks have attained the stage of a depth epigenesis and early metagenesis (Ref 3). That is due to the position of the mass in the middle and peripheral part of geosynclinal. These rocks were sedimented in

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the sea within the range of a shelf as well as on the corresponding slope with unstable hydrodynamic conditions, where suspended terrigenous material and also organic substance were carried. The decomposition of the latter in mud led to the formation of  $H_2S$ -heaths, which possibly extended also to the layer near the bottom. This favored neither organic life nor the deposition of carbonates. Therefore, fauna is probably lacking in most sediments of the Tauric formation. The formation is a terrigenous, carbonateless flysch which was produced by erosion of Paleozoic, primarily of Carboniferous sediments of the adjacent Northern regions. It is possible that another cordillera consisting of Paleozoic formations exists in the South in the place of the recent Black Sea. -There are 1 table and 5 Soviet references.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo  
(Khar'kov State University imeni A. M. Gor'kiy)

Card 3/4

KARPOVA, G.V.

Characteristics of clayey rocks from the Tauric flysch of the  
Crimea. Dokl. AN SSSR 135 no.3:709-712 N '60. (MIRA 13:12)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo. Pred-  
stavleno akad. N.M. Strakhovym.  
(Crimea—Clay)

LOGVINENKO, N.V.; KARPOVA, G.V.; SHANDYBA, K.G.; SHAPOSHNIKOV, D.P.

Stratigraphic subdivision of Tauric strata in the Crimea. Dokl.AN  
SSSR 137 no.5:1188-1191 Ap '61. (MIRA 14:4)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'koga. Pred-  
stavleno akademikom N.M.Strakhovym.  
(Crimea—Geology, Stratigraphic)

LOGVINENKO, N.V.; KARPOVA, G.V.; KOSMACHEV, V.G.

The system of isomorphous substitutions in carbonates of the calcite group of sedimentary origin. Dokl.AN SSSR 138 no.1:188-191 My-  
Je '61. (MIRA 14:4)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.  
Predstavleno akademikom N.V.Belovym.  
(Isomorphism) (Calcite)

LOGVINENKO, N.V.; KARPOVA, G.V.

Carbonate concretions in the Taurian formation in the Crimea.  
Zap.Vses.min.ob-va 90 no.3:326-338 '61. (MIRA 14:10)

1. Khar'kovskiy gosudarstvennyy universitet, kafedra petrografii.  
(Crimea--Concretions) (Rocks, Carbonate)



LOGVINENKO, N.V.; KARPOVA, G.V.; SHAPOSHNIKOV, D.P.; KOSMACHEV, V.G.

Stages of mineral formation in deposits of the Taurian series  
of the Crimea. Dokl. AN SSSR 142 no.4:922-925 F '62.  
(MIRA 15:2)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.  
Predstavleno akademikom N.M.Strakhovym.  
(Crimea—Petrology)

LOGVINENKO, Nikolay Vasil'yevich, **prof.**; KARPOVA, Galina Vasil'yevna, .  
 kand. geol.-min. nauk; SHAPOSHNIKOV, Dmitriy Prokof'yevich,  
 Prinsipali uchastiye: LEBEDINSKIY, V.I., kand. geol.-mine. nauk  
 starshiy nauchnyy sotr.; BELIK, P.G., dots.; KOSMACHEV, V.G.,  
 student; REMIZOV, I.N., dots.; ALYAE'YEV, N.Z., red.;  
 ALEKSANDROVA, G.P., tekhn. red.

[Lithology and genesis of the Taurian formation in the Crimea]  
 Litologiya i genezis tavrisheskoi formatsii Kryma. Pod red.  
 N.V.Logvinenko i I.N.Remizova. Khar'kov, Izd-vo Khar'kovskogo  
 univ., 1961. 400 p. (MIRA 15:10)

1. Kafedra petrografii Khar'kovskogo gosudarstvennogo univer-  
 siteta (for Logvinenko, Karpova, Belik). 2. Geologicheskii  
 fakul'tet Khar'kovskogo gosudarstvennogo universiteta (for  
 Kosmachev ). 3. Institut mineral'nykh resursov Akademii nauk  
 Ukrainskoy SSR (for Lebedinskiy).  
 (Crimea--Petrology)

LOGVINENKO, Nikolay Vasil'yevich; KARPOVA, G.V., kand. geol.-miner.  
nauk, otv. red.; NESTERENKO, A.S., red.; SEMASHKO, Yu.YU.,  
tekh. red.

[Principles of the methods for studying sedimentary rocks]  
Osnovy metodiki issledovaniia osadochnykh porod. Izd.2.,  
perer. i dop. Khar'kov, Izd-vo Khar'kovskogo univ., 1962.  
205 p. (MIRA 15:11)  
(Rocks, Sedimentary--Analysis)

LOGVINENKO, N.V.; KARPOVA, G.V.; KOSMACHEV, V.G.; SHAPOSHNIKOV, D.P.

Genesis of flysch deposits of the Tauric formation in the Crimea.  
Dokl.AN SSSR 145 no.4:879-882 Ag '62. (MIRA 15:7)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.  
Predstavleno akademikom N.M.Strakhovym.  
(Crimea--Flysch)

KARPOVA, G.V. [Karpova, H.V.]; KOSMACHEV, V.C. [Kosmachov, V.H.]

Carbonate concretions in the Middle Jurassic marine sediments  
of the northwestern margin of the Donets Basin. Dop. AN URSR  
no.9:1244-1247 '62. (MIRA 18:4)

1. Khar'kovskiy gosudarstvennyy universitet.

KARPOVA, G.V.; KULESKO, G.I.

Some results of the X-ray examination of clays in the Dnieper-Donets  
Lowland. Rent.min.syr. no.3:138-146 '63. (MIRA 17:4)

1. Khar'kovskiy gosudarstvennyy universitet.

LOGVINENKO, N.V. [Lohvynenko, M.V.]; KARPOVA, G.V. [Karpova, H.V.];  
KOSMACHEV, V.G. [Kosmachov, V.H.]; SHAPOSHNIKOV, D.P.

Some remarks concerning V.S.Sasincovich's article "Significance of  
markings in the Taurian formation of the Crimean Mountains." Geol.zhur.  
23 no.1:98-101 '63. (MIRA 16:4)

1. Khar'kovskiy gosudarstvennyy universitet im. Gor'kogo.  
(Crimean Mountains--Paleontology)  
(Sasincovich, V.S.)

LOGVINENKO, N.V.; KARPOVA, G.V.; KOSMACHEV, V.G.

Recent data on the composition and stage variations of the Mesozoic  
deposits of southwestern Ciscaucasia. Dokl. AN SSSR 148 no.6:  
1370-1373 F '63. (MIRA 16:3)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.  
Predstavleno akademikom A.L.Yanshinym.  
(Caucasus, Northern—Geology, Structural)



KARPOVA, G.V.; KULESKO, G.I.

Clay minerals in the continental Neogene of the Dnieper-  
Donets Lowland. Dokl. AN SSSR 150 no.4:890-893 Je '63.

(MIRA 16:6)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.  
Predstavleno akademikom N.M. Strakhovym.

(Dnieper-Donets Lowland.--Clay)

LOGVINENKO, N.V.; KARPOVA, G.V.; KOSMACHEV, V.G.; LAGUTIN, A.A.

Organic carbon in the Taurian flysch formation of the Crimea. Dokl.  
AN SSSR 150 no.5:1140-1143 Je '63. (MIRA 16:8)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogò.  
Predstavleno akademikom N.M.Strakhovym.  
(Crimea--Bitumen)

LOGVINENKO, N.V.; KARPOVA, G.V.; KOSMACHEV, V.G.

Genesis of carbonates in terrigenous flysch layers. Izv. vys.  
ucheb. zav.; geol. i razv. 6 no.4:77-87 Ap '63. (MIRA 16:6)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.  
(Carbonates) (Flysch--Analysis)

RAYKHSHTAT, G.N.; LEYKINA, R.F.; KARASEVA, M.F.; KARPOVA, G.V.; GEDE, E.O.;  
LOMAKINA, A.Ye.

Study of colienteritis occurrence in day nurseries. Zhur. mikrobiol.,  
epid. i immun. 40 no.11:143 N '63. (MIRA 17:12)

1. Iz sanitarno-epidemiologicheskoy stantsii Sverdlovskogo rayona  
Moskvy.

KARPOVA, G.V. [Karpova, H.V.]; SHEVYAKOVA, E.P. [Shev'iakova, E.P.]

Sandstones with thuringite from the Araucarites series  
(C<sub>3</sub>) of the intermediate region of the Greater Donets trough.  
Dop. AN URSR no.3:369-372 '64. (MIRA 17:5)

1. Khar'kovskiy gosudarstvennyy universitet i trest  
"Kharkivnafterozvidka". Predstavleno akademikom AN UkrSSR  
O.S. Vyalovym.

L 31118-65 EPF(c)/EPF(n)-2/EM(j)/EMA(h)/EMT(n)/T/EMA(1)/EWP(j) PC-L/PR-L/YU-L/POB  
CC/JAJ/RN/GS

ACCESSION NR: AT4049850

S/0000/64/000/000/0122/0125

AUTHOR: Golubev, V. V.; Karpova, G. V.; Korshak, V. V.; Rafikov, S. R.;  
Tsetlin, B. L.; Chao, Hsiang-Tsun

TITLE: Chemical transformations of polymers. K. Radiation-induced chemical  
reactions of mixed polyesters based on terephthalic and sebacic acids and ethylene  
glycol

SOURCE: Khimicheskiye svoystva i modifikatsiya polimerov (Chemical properties  
and the modification of polymers); sbornik statey. Moscow, Izd-vo Nauka, 1964,  
122-125

TOPIC TAGS: mixed polyester, terephthalic acid, sebacic acid, ethylene glycol,  
polyethylene sebacate, polyethylene terephthalate, vulcanization, dicarboxylic  
acid, ionizing radiation, x-ray vulcanization

ABSTRACT: The radiation-induced chemical reactions of polyesters obtained by  
polycondensation of dicarboxylic acids with diols were investigated. Polyethylene  
sebacate, polyethylene terephthalate and mixed polyesters obtained from a mixture  
of sebacic and terephthalic acids, containing 10, 20, 40, 50, 70 and 80 mol.%  
terephthalic acid, were used as test samples. Polycondensation was carried out  
in nitrogen, then in a vacuum (2mm) over a temperature range of 180-260C.

L 34148-65

ACCESSION NR: AT4049850

3

The reduced viscosity of the resulting polyester varied from 0.3 to 0.5. Small disks 5 mm in diameter and 1 mm thick were investigated. The samples were irradiated in an X-ray apparatus of the TRTs-3 type at 80 kv, at a current of 200 ma, dose  $5 \times 10^{16}$  ev/cc/sec. The nature of the reactions was determined on the basis of the thermomechanical properties, and the variation in solubility and viscosity of the solutions was also determined. It was found that in many mixed polyesters, the rate of radiation vulcanization decreases gradually as the amount of terephthalic acid residues in the polymer increases. At low and medium radiation doses polyethylene terephthalate showed radiation-induced degradation. At higher doses ( $10^{23}$  ev/cc), it undergoes vulcanization, while for amorphous samples, the rate of radiation vulcanization is higher. The solubility of certain samples was unchanged after irradiation. The reduced viscosity of the cresol solution (0.2% by weight) of TSEG-82 (mixed polyester) increased from 0.31 to 0.44, while for polyethylene terephthalate it decreased from 0.50 to 0.30, which showed partial degradation. The effect of the degree of crystallinity of the sample on the character and rate of radiation-induced chemical transformations was also investigated and discussed. Orig. art. has: 2 figures.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Heteroorganic compounds institute, AN SSSR)

Card 2/3

KARPOVA, G.V.

Some occurrences of authigene hydromicratization in terrigenous sediments. Dokl. AN SSSR 164 no.2:422-425 S '65.

(MIRA 18:9)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.  
Submitted May 26, 1965.



KARIVA, O.V.

Mineral phases formed by the heating of some carbonates.  
Zap. Vses. min. ob-va 92 no.3434-348 '63. (MIRA 17:9)

KARPOVA, G. V.

KONASHIN, V. V., GOLUBOV, V. V., and KARPOVA, G. V.

"Investigation of rubbery mixed polyesters," a paper presented at the 9th Congress on the Chemistry and Physics of High Polymers, 20 Jan-2 Feb 57, Moscow, Research Inst. Organic Chem., Acad. Sci.

B-3,004,395

2.03  
KORSHAK, V.V.; GOLUBEV, V.V.; KARPOVA, G.V.

Heterogenous chain polyesters. Report No. 6: Mixed polyesters of ethylene glycol and two dicarboxylic acids. Izv. SSSR. Otd. khim. nauk no.1:88-95 Ja '58. (MIRA 11:1)

1. Institut elementoorganicheskikh soedineniy AN SSSR.  
(Ethylene glycol) (Acids)

5(3)

AUTHORS:

Korshak, V. V., Golubev, V. V.,  
Karpova, G. V., Dubova, T. A.

SOV/62-59-3-24/37

TITLE:

On Polyesters With Heterogeneous Chains (O geterotsepykh poliefirakh). Communication 15. Mixed Polyesters of Tetramethylene Glycol and Two Dicarboxylic Acids (Soobshcheniye 15. Smeshannyye poliefiry tetrametilenglikolya i dvukh dikarbonovykh kislot)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 3, pp 540-545 (USSR)

ABSTRACT:

In the present paper systems of mixed polyesters of tetramethylene glycol which contain the following dicarboxylic acids were investigated: terephthalic acid - succinic acid, terephthalic acid - glutaric acid, terephthalic acid - adipic acid, terephthalic acid - pimelic acid, terephthalic acid - suberic acid, terephthalic acid - azelaic acid, terephthalic acid - sebacic acid, sebacic acid - azelaic acid, sebacic acid - adipic acid, and azelaic acid - adipic acid. The ratio between the components was widely changed. The properties of the double, mixed polyesters investigated are given in tables 1-10. In the comparative tables the melting temperatures (filament formation) (Table 11) as well as the solubility (Table 12) of the mixed

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On Polyesters With Heterogeneous Chains.

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Communication 15. Mixed Polyesters of Tetramethylene Glycol and Two Dicarboxylic Acids

polyesters in benzene with heating, according to the composition and the ratio of the initial acids, are given. As may be seen from tables 1-10, the temperatures of filament formation as well as the solubilities of mixed polyesters of tetramethylene glycol change in a similar way as the polyesters of ethylene glycol (Ref 1). In this case there are also minima of the melting temperatures which coincide with the ratios 10/90, 20/80, or 30/70 mol% of terephthalic and aliphatic acid. The solubility of the polyesters of tetramethylene glycol is somewhat higher than that of the polyesters of ethylene glycol. Many of them are soluble in benzene. All corresponding polyesters of ethylene glycol are, however, insoluble. The melting temperatures of aromatic-aliphatic polyesters with 100 to 70 mol% of the terephthalic-acid content are higher than those of the corresponding polyesters of ethylene glycol. Polyesters of tetramethylene glycol containing 50 mol% and less of terephthalic acid melt at lower temperatures than corresponding polyesters of ethylene glycol. Polyesters of two aliphatic acids occupy a special place. In every ratio they form

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Communication 15. Mixed Polyesters of Tetramethylene Glycol and Two Dicarboxylic Acids

filaments at lower temperatures than aromatic - aliphatic polyesters and all of them are soluble in benzene. Numerous mixed polyesters of tetramethylene glycol form sufficiently solid foils and films which are capable of being stretched at low temperatures. There are 12 tables and 1 Soviet reference.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR  
(Institute of Elemental Organic Compounds of the Academy of Sciences, USSR)

SUBMITTED: June 27, 1957

Card 3/3

LOGVINENKO, N.V.; KARPOVA, G.V.; KULESKO, G.I.

Mineralogy of the Tertiary fire clays of the Ukraine. Lit. 1 pol.  
iskop. no.4:96-104 JI-Ag '64. (MIRA 17:11)

1. Khar'kovskiy gosudarstvennyy universitet.

KARPOVA, G. V.; SHEVYAKOVA, E. P.

New data on Upper Carboniferous sediments in the transition  
area of the Greater Donets trough. Dokl. AN SSSR 155 no. 2:  
31-336 Mr '64. (MIRA 17:5)

1. Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo.  
Predstavleno akademikom D. I. Shcherbakovym.



KARLOVA, G.M.; SHIVYAKOVA, E.I.

Characteristics of epinephrine in the transitional region of the  
Greater Benete trough. USSR. AN SSSR. 140 no.11:1093-1096 F '65.  
(MIRA 18:2)  
1. Zhar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo i  
vesti "Zhar'kovskiy gosudarstvennyy universitet". Submitted March 14, 1964.

KARPOVA, G.V.; SHEVYAKOVA, E.F.

Epigenetic alterations in the clay matter of terrigenous  
Carboniferous sediments in the Dnieper-Donets Lowland.  
Lit. i pol.iskop. no.2:70-84 Mr-Apr '65. (MIRA 18:6)

1. Khar'kovskiy gosudarstvennyy universitet i Khar'kovgaz-  
nefterazvedka.

LCGVINENKO, N.V. [Lohvynenko, M.V.]; KARPOVA, G.V. [Karpova, H.V.];  
KOSMACHEV, V.G. [Kosmachov, V.H.]; SHAPOSHNIKOV, D.P.  
[Shaposhnykov, D.P.]

Facies of the Taurean terrigenous flysh formation of the  
Crimea. Dop. AN URSR no.10:1342-1345 '62.

(MIRA 18:4)

1. Khar'kovskiy gosudarstvennyy universitet.

PROCESSES AND PROPERTIES INDEX																									
1ST AND 2ND QRD(S)													3RD AND 4TH QRD(S)												
<p>Electrochemical study of water, glycerol and water-ethylene glycol solutions. I. I. Zhukov and I. F. Kuznetsov. <i>J. Gen. Chem.</i> (U.S.S.R.) 6, 61 (1960).</p> <p>In contrast to <math>\text{EtOH}</math>, the addn. of glycerol or ethylene glycol, even in large amts., to aq. acetate or phosphate buffered solns. or to dil. <math>\text{HCl}</math> and <math>\text{H}_2\text{SO}_4</math> solns. affects but slightly the <math>\text{H}</math>-ion concn. as measured by means of a <math>\text{H}</math> electrode. Z. and K. assume that in the case of <math>\text{EtOH}</math> the reversible reaction <math>\text{EtOH} + [\text{H}_3\text{O}]^+ \rightleftharpoons [\text{EtOH}_2]^+ + \text{H}_2\text{O}</math> proceeds in the direction of forming <math>[\text{EtOH}_2]^+</math> ions, while in the case of glycerol or glycerol, ions of this type are formed to such slight degree that the electrode potential remains practically unchanged. I. Livak</p>																									
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
1ST QRD(S)													2ND QRD(S)												
3RD QRD(S)													4TH QRD(S)												

1ST AND 2ND ORDERS																										PROCESSES AND PROPERTIES INDEX																									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50																										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50																									
<p>Effect of hydrogen-ion concentration on the oxidation of ferrous salts. I. F. Karpov. <i>J. Gen. Chem.</i> (U. S. S. R.) 7, 2013-19 (in French 2010) (1937).—Air was bubbled through solns. of <math>\text{FeSO}_4</math> and <math>(\text{NH}_4)_2\text{SO}_4 \cdot \text{FeSO}_4</math> at room temp. Rate of oxidation was greater for <math>\text{FeSO}_4</math> than that for Mohr's salt and in both cases it increased with concn. of the salt. S. L. Madorsky</p>																																																			
<p>ASH SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

KARPOVA, L.F.

U S S R .

✓ Colloid-chemical studies on objects of regular geometric form. I. The effect of form and dimensions on cataphoretic speed and particle adhesion. L. F. Karpova. *Vysokye Zapiski Leningrad. Gosudar. Univ. Ser. Khim. Nauk* No. 10, 67-68 (1951).—In expts. made in pure water (I), 0.001N KCl (II), and 0.0005N KCl (III), the cataphoretic velocity of glass and polystyrene spheres was independent of size in the diam. range 4 to 20  $\mu$ . For glass the velocities were 3.0  $\mu$ /sec./v./cm. in I; 3.8 in II; 4.3 in III. For polystyrene the velocity was 4.2 in I. Particles of 0.8-2  $\mu$  diam. have significantly lower speeds. II. The effect of electrolytes and surface-active substances on cataphoretic speed and adherence number. *Ibid.* 90-118.—With glass spheres (4-20  $\mu$  diam.) in alkali metal chloride solns. (0-1.2 mmol./l.) cataphoretic velocity rose to a max. at about 0.3 mmol./l. and then declined with further increase in concn. The max. velocities attained were ( $\mu$ /sec./v./cm.): 6.70 in LiCl, 5.36 in NaCl, 5.2 in KCl, 4.8 in RbCl, and 4.65 in CsCl. Expts. with particles of irregular

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I. F. Karpass

shape gave similar results in these solns. and in  $\text{NH}_4\text{Cl}$  soln. The adherence no. rose with concn. In  $\text{CsCl}$ , 100 was attained at 0.08 mmol./l.,  $\text{RbCl}$  at 0.2,  $\text{KCl}$  at 1.0,  $\text{NaCl}$  at 1.5. In 1.5 mmol./l.  $\text{LiCl}$ , the adherence no. was 83. Except for  $\text{BaCl}_2$ , which produced a max. cataphoretic velocity (3.3  $\mu\text{sec./v./cm.}$ ) at 0.02 mmol./l., the chlorides of bivalent metals ( $\text{Mg}$ ,  $\text{Ca}$ ,  $\text{Sr}$ ) produced a continuous decline of velocity with increasing concn. The adherence nos. attained were 100 in  $\text{BaCl}_2$  0.05 mmol./l.,  $\text{SrCl}_2$  0.08,  $\text{CaCl}_2$  0.10, and  $\text{MgCl}_2$  0.5. When  $\text{AlCl}_3$  was added, the glass particles moved in the reverse direction and reached a max. speed of 4.2  $\mu\text{sec./v./cm.}$  at 0.30 mmol./l. The adherence no. reached 100 at 0.08-0.10 mmol./l. and again at 0.40, falling to a min. of 87 at 0.30 mmol./l.  $\text{AlCl}_3$ . When fatty acids were added as the electrolyte, the curves were similar in shape to those observed for alkali chlorides, except that min. cataphoretic velocities were observed at concns. between 0 and those corresponding to the max. velocities. These minima occurred at even lower concns. when 0.01N  $\text{KCl}$  is present in addn. to the acid (caprylic, heptylic, and nonylic).

C. H. Fuchsman

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GRIGOROV, Oleg Nikolayevich, professor; KARPOVA, I.F.; KCH'MINA, Z.P.;  
FRIDRIKHSBERG, D.A.; MELAREV, L.A., redaktor; IVANOVA, A.V.,  
tekhnicheskiy redaktor

[Manual of experiments in colloid chemistry] Rukovodstvo k prakti-  
cheskim zaniatiyam po kolloidnoi khimii. [Leningrad] Izd-vo Lenin-  
gradskogo univ., 1955. 211 p. (MLBA 9:10)  
(Colloids)



KARPOVA, I. E.

✓ The structural and electrochemical properties of precipitated membranes. I. E. Karpova, L. A. Ignat'eva, and N. M. Rusakova. *Viznik Leningrad. Univ.* 11, No. 4, Ser. Fiz. Khim., No. 1, 117-23 (1960). Reproducible membranes from  $\text{Cu}_2\text{Fe}(\text{CN})_6$  and  $\text{Fe}_3[\text{Fe}(\text{CN})_6]_4$  with av. pore radius 1-12 mμ, pptd. on a colloidal film were prepd. and studied. The no. of  $\text{Cl}^-$  transported (I) was measured by 2 methods: an analytical method according to O. N. Grigorov and L. M. Nosova (cf. *Uchenye Zapiski Leningrad. State Univ., Ser. Khim.* No. 131(1940)) and a diffusion method according to T. Teorell (cf. *J. Gen. physiol.* 10, 671(1937)). I depended on the av. pore radius of the membranes. With diminishing pore radius I decreased. The pptd. membranes showed higher electrochem. activity than did colloidal membranes. 10 references. N. Churmandarian

KARPOVA, I I

USSR/Chemistry of Colloids - Dispersed Systems.

B-14

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18794

Author : I.F. Karpova, L.A. Ignat'yeva.

Inst : Leningrad University.

Title : Structural and Osmotic Properties of Collodion and Precipitation Membranes of Copper Ferricyanide.

Orig Pub : Vestn. Leningr. un-ta, 1956, No 16, 105-109

Abstract : The osmotic pressure of the 0.4% saccharose solution on collodion membranes (average pore radius 1 to 10  $m\mu$ ) and precipitation membranes produced of  $Cu_2/Fe(CN)_6$  impregnated into the collodion film (average pore radius 1 to 10  $m\mu$ ) was measured. It was shown that for osmotic pressure measurements, the average pore radius of collodion membranes should not exceed 1  $m\mu$ , and that of precipitation membranes should not exceed 4.1  $m\mu$ .

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AUTHORS: Karpova, I. F., Spasibenko, T. P. SOV/54-58-3-15/19

TITLE: The Dependence of the Structural and Mechanical Properties of Copper Ferrocyanide Sols on the Conditions of Their Preparation (Issledovaniye zavisimosti strukturno-mekhanicheskikh svoystv zoley ferrotsianida medi ot usloviy polucheniya)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1958, Nr 3, pp 126-133 (USSR)

ABSTRACT: In the present paper the authors investigated the influence of the production and especially the influence of the anions contained in the solution upon the structural and mechanical properties of copper ferrocyanide sols. Copper ferrocyanide sols were obtained by the interaction of  $K_4[Fe(CN)_6]$  and of the copper salts  $Cu(NO_3)_2$ ,  $CuSO_4$ ,  $Cu(C_2H_3O_2)_2$  and  $CuCl_2$  at different concentrations and a varying ratio of the initial solutions. It has been found that  $Cu_2[Fe(CN)_6]$  sols are unstable under "toxic" influences and suffer an irreversible change of structure when decomposed. The dependence

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SOV/54-58-3-15/19  
The Dependence of the Structural and Mechanical Properties of Copper Ferrocyanide Sols on the Conditions of Their Preparation

of the viscosity on time ( $\eta$ -T) was found. The viscosity decreases with advancing time. It decreases the most during the first two hours after the formation of the sol. Radiograms showed that the precipitates of  $\text{Cu}_2[\text{Fe}(\text{CN})_6]$  initially exhibit an amorphous structure. Gradually, during aging they begin to crystallize. It has been shown that the anion composition in the solution has a strong influence upon the structural and mechanical properties of the  $\text{Cu}_2[\text{Fe}(\text{CN})_6]$  sols. The following order was obtained for the degree of anion influence:  $\text{NO}_3' < \text{CH}_3\text{COO}' < \text{SO}_4'' < \text{Cl}'$ .

There are 9 figures, 1 table, and 6 references, 3 of which are Soviet.

SUBMITTED: March 17, 1958

Card 2/2

VERPOVA, I.F.; LEONOVA, T.G.; LOGVINOVA, N.A.; SMIRNOVA, V.N.

Ion exchange properties of zeolite and deposits of copper ferrocyanide. Vest. LGU 14 no.22:97-103 '69. (MIR 19:11)  
(Copper ferrocyanide) (Ion exchange)

ORIGOROV, O.N., prof.; KARPOVA, I.F.; KOZ'MINA, Z.P.; TIKHOMOLOVA,  
K.P.; FRIDRIKHSBERG, D.A.; CHERNOBRYEZHSKIY, Yu.M.;  
MYASNIKOVA, L.B., red.

[Manual on laboratory work in colloid chemistry] Rukovodstvo  
k prakticheskim rabotam po kolloidnoi khimii. Izd.2., perer.  
1 dop. Moskva, Khimiia, 1964. 330 p. (MIRA 18:3)

KARPOVA, I. F.; KAZAKOV, Ye. V.

Colloidal chemical processes taking place in food products  
during storage. Izv.vys.ucheb.zav.; pishch.tekh.no. 2:21-23  
'64. (MIRA 17:5)

1. Leningradskiy institut sovetskoy trgovli imeni F. Engelsa,  
kafedra organicheskoy, fizicheskoy i kolloidnoy khimii.

KARPOVA, I.F.; SMIRNOVA, V.N.; FRIDRIKHSBERG, D.A.

Electrokinetic properties of copper ferrocyanide precipitates  
obtained under various conditions. Vest. LGU 19 no.4:99-104  
'64. (MIRA 17:3)



ABRAMOVA, N.A., nauchn. sotr.; BEL'CHENKO, G.V., kand. tekhn. nauk;  
 BERENBLIT, V.V., nauchn.sotr.; VASIL'YEV, V.P., kand.khim.  
 nauk; DOBYCHIN, D.P., doktor khim. nauk; IOFFE, B.V., dokt.  
 khim.nauk; KAMINSKIY, Yu.L., nauchr.sotr.; KARPOVA, I.F.,  
 kand. khim. nauk; KOPYLEV, B.A., dcktor khim. nauk;  
 LUTUGINA, N.V., kand. khim. nauk; MATEROVA, Ye.A., kand.  
 khim. nauk; MORACHEVSKIY, A.I.G., kand. khim. nauk;  
 MORACHEVSKIY, An.G., kand. khim. nauk; NIKEROV, A.E., kand.  
 khim. nauk; PAL'M, V.A., kand. khim. nauk; RABINOVICH, V.A.,  
 kand. khim. nauk; SOKOLOV, P.N., kand. khim. nauk;  
 FRIDRIKHSBERG, D.A., kand. khim. nauk; TSYGIR, Ye.N., nauchn.  
 sotr.; SHAGITSULTANOVA, G.A., kand. khim. nauk; SHKODIN, A.M.,  
 doktor khim. nauk; YATSIMIRSKIY, K.B.; GRIGOROV, O.N., doktor khim.  
 nauk, red.; ZASLAVSKIY, A.I., kand. khim. nauk, red.; MORACHEVSKIY,  
 Yu.V., prof., red.; RACHINSKIY, F.Yu., kand. khim. nauk, red.;  
 POZIN, M.Ye., doktor tekhn. nauk, red.; PORAY-KOSHITS, B.A., doktor  
 khim. nauk, red.; PROTASOV, A.M., kand. fiz.-mat. nauk, red.;  
 ROMANKOV, P.G., red.

[Handbook for the chemist] Spravochnik khimika, 2. izd., perer. i  
 dop. Moskva, Khimiia. Vol.3. 1964. 1004 p. (MIRA 18:1)

1. Chlen-korrespondent AN SSSR (for Romankov). 2. Deystvitel'nyy  
 chlen AN Ukr.SSR (for Yatsimirskiy).

L 57004-65 EWG(j)/EWT(m)/EWG(m)/EWP(j)/EWE(t)/EWP(b)/EWA(h)/EWA(l) Pc-4/  
Feb IJP(c) JD/RM

ACCESSION NR: AP5017101

UR/0054/65/000/002/0095/0102

AUTHOR: Kazakov, Ye. V.; Karpova, I. F.

TITLE: Ion-exchange properties of copper ferrocyanides

SOURCE: Leningrad. Universitat. Vestnik. Seriya fiziki i khimii, no. 2, 1965, 95-102

TOPIC TAGS: copper ferrocyanide, ion exchange, potassium ferrocyanide, copper salt, inorganic ion exchanger, ferrocyanide membrane, macroelectrophoresis, anion exchanger, hard gamma radiation

ABSTRACT: In some cases inorganic ion exchangers are superior to ion-exchange resins, which disintegrate at temperatures exceeding 100°C and have a low resistance to acids and alkalis and irradiation. Nevertheless, ion exchange based on inorganic ion exchangers has so far been relatively uninvestigated. For example, copper ferrocyanides are capable of exchange interaction with ions of barium and cesium. In this connection, the study of the ion-exchange properties of ferrocyanides is of interest to the solution of a number of major problems concerning certain properties of ferrocyanide membranes, their selective permeability, the variability of composition of the ferrocyanides of heavy metals

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ACCESSION NR: AF5017101

as a function of the type of alkali metal present in the solution during precipitation of ferrocyanide. It is also known that the anions of the particular copper salt used to obtain a ferrocyanide affect the properties of ferrocyanides. In this connection, the authors investigated the ion exchange properties of copper ferrocyanides as a function of the techniques of obtaining these ferrocyanides and with respect to the ions of sodium, potassium, and copper, depending on the ratio between  $K_4Fe(CN)_6$  and the anions of the different copper salts. The copper ferrocyanide precipitates were obtained by combining different volumes of source reagents, and by draining or decanting the precipitate. The source reagents used were  $K_4Fe(CN)_6$  and the copper salts  $CuSO_4$ ,  $CuCl_2$ ,  $Cu(NO_3)_2$ , and  $Cu(CH_3COO)_2$ . The polarity of the charge and the magnitude of the  $\zeta$ -potential were verified by macroelectrophoresis in 0.01N HCl. The exchange interaction between  $H^+$  ions and  $Na^+$  and  $K^+$  was investigated on negatively charged ferrocyanide powders, and the exchange interaction between  $OH^-$  ions and  $Cl^-$  ions, on positively charged powders. The pH-dependence of the exchange capacity of the ferrocyanides was investigated by the method of curves of potentiometric titration. It was found that the exchange capacity with respect to  $Na^+$  and  $K^+$  differs for ferrocyanides obtained under the same conditions. Further, on ferrocyanides obtained from excess  $K_4Fe(CN)_6$  with  $CuSO_4$  and  $CuCl_2$  the adsorption

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ACCESSION NR: AP5017101

of  $\text{Na}^+$  and  $\text{K}^+$  is greater than on ferrocyanides obtained from  $\text{Cu}(\text{CH}_3\text{COO})_2$  or with equivalent ratios of source reagents. Thus, for the case of excess  $\text{K}_4\text{Fe}(\text{CN})_6 + \text{CuSO}_4$  the adsorption of  $\text{Na}^+$  and  $\text{K}^+$  on the copper ferrocyanide amounts to 0.28 mg-equiv/g for both ions, whereas in the case of equivalent ratio between  $\text{K}_4\text{Fe}(\text{CN})_6$  and  $\text{CuSO}_4$  this adsorption amounts to 0.15 mg-equiv/g for both ions, and for the case of excess  $\text{CuSO}_4 + \text{K}_4\text{Fe}(\text{CN})_6$  it amounts to 22 mg-equiv/g for both ions. Thus, the type of the copper-salt anion and the reagent ratio do indeed affect the exchange capacity of the investigated ferrocyanides. Ferrocyanides obtained when the ratio of the copper salt to  $\text{K}_4\text{Fe}(\text{CN})_6$  exceeds 1:1 are anion exchangers. The absorption of copper ions by the positively charged surface of the copper ferrocyanides was somewhat unexpected; but this is attributed by Schultz and Herce (Croat. chim. acts, 30, no. 2, 127, 1958) to the specific nature of the adsorption of the ions of heavy metals. Exposure of the ferrocyanides to  $\text{Co}^{60}$  hard  $\gamma$ -radiation (30,000 rem) and their subsequent X-ray diffraction studies revealed that copper ferrocyanides are radiation-resistant, which expands their range of applications as ion exchangers. Orig. art. has: 5 figures, 3 tables.

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